We claim:

1. A method of data transmission comprising the steps of:

dividing a data packet into a plurality of data sub-packets;

transmitting a first control information associated with one of the plurality of data sub-packets over a time slot x of a control channel; and

transmitting the associated one of the plurality of data sub-packets over a time slot y of a data channel.

2. The method of claim 1, wherein the first control information indicates a manner of decoding the associated one of the plurality of data sub-packets.

3. The method of claim 1 comprising the additional step of:

channel coding the data packet prior to the step of dividing the data packet into the plurality of data sub-packets.

4. The method of claim 1 comprising the additional step of:

channel coding the associated one of the plurality data sub-packets prior to the step of transmitting the associated one of the plurality of data sub-packets.

5. The method of claim 1, wherein the time slot x of the control channel and the time slot y of the data channel are time synchronized to each other.

6. The method of claim 1, wherein time slot x-z of the control channel and the time slot y of the data channel are time synchronized to each other and z is an integer.

7. The method of claim 1, wherein the time slot x of the control channel and the time slot y of the data channel are not time synchronized to each other and the control information includes an indication of the associated one of the plurality of data sub-packets.

8. The method of claim 1 comprising the additional step of:

transmitting a second control information associated with a second of the plurality of data sub-packets over a time slot x+1 of the control channel; and

transmitting the associated second of the plurality of data sub-packets over a time slot y+1 of the data channel.

9. The method of claim 8, wherein the first and second control information are identical.

10. The method of claim 8, wherein the second control information indicates a manner of decoding the associated second of the plurality of data sub-packets.

11. The method of claim 1 comprising the additional step of:

transmitting the first control information over a time slot p of another control channel.

12. The method of claim 1, wherein the time slot x of the control channel and the time slot p of the other control channel are time synchronized to each other.

13. The method of claim 1, wherein the first control information includes a new/continuation flag to indicate whether the associated one of the plurality data sub-packets is a beginning of a new data packet transmission or a continuation of a data packet transmission in progress.

14. The method of claim 1, wherein the first control information includes a sequence identifier to indicate a sequence of the associated one of the plurality data sub-packets.

15. The method of claim 1, wherein the first control information includes a user identifier to indicate a user to whom the associated one of the plurality of data sub-packets is intended.

16. The method of claim 1, wherein the first control information is channel coded prior transmission.

17. The method of claim 1 comprising the additional step of:

transmitting user specific flags over a time slot q of a user identity channel to indicate one or more users to whom the associated one of the plurality of data sub-packets is intended.

18. The method of claim 1, wherein user specific flags associated with users to whom the one of the plurality of data sub-packets are intended are set to one and user specific flags associated with users to whom the one of the plurality of data sub-packets are not intended are set to zero.

19. The method of claim 1, wherein the user specific flags associated with users to whom the associated one of the plurality of data sub-packets are intended are turned on or set to one and transmitted when the associated one of the plurality of data sub-packets is a first data sub-packet or a last sub-packet of the data packet.

20. The method of claim 19, wherein the user specific flag is an in-phase signal when the associated one of the plurality of data sub-packets is the first data sub-packet and a quadrature signal when the associated one of the plurality of data sub-packets is the last sub-packet of the data packet.

21. The method of claim 1, wherein the control channel is power controlled.

22. The method of claim 21 comprising the additional step of:

receiving control channel quality feedback from a receiver to which the data packet is intended.

23. A transmitter comprising of:

means for dividing a data packet into a plurality of data sub-packets;

means for transmitting a first control information associated with one of the plurality of data sub-packets over a time slot x of a control channel; and

means for transmitting the associated one of the plurality of data sub-packets over a time slot y of a data channel.

24. The transmitter of claim 22 further comprising of:

means for channel coding the data packet or the plurality of data sub-packets.

25. The transmitter of claim 22 further comprising of:

means for transmitting a second control information associated with a second of the plurality of data sub-packets over a time slot x+1 of the control channel; and

means for transmitting the associated second of the plurality of data sub-packets over a time slot y+1 of the data channel.

26. The transmitter of claim 25, wherein the first and second control information are identical.

27. The transmitter of claim 23 further comprising of:

means for transmitting a new/continuation flag in a time slot q of a new/continue channel to indicate whether the associated one of the plurality data sub-packets is a beginning of a new data packet transmission or a continuation of a data packet transmission in progress.

28. The transmitter of claim 23 further comprising of:

means for transmitting a sequence identifier in a time slot q of a communication channel parallel to the data or control channel to indicate a sequence of the associated one of the plurality data sub-packets.

29. The transmitter of claim 22 further comprising of:

means for channel coding the first control information.

30. The transmitter of claim 22 further comprising of:

means for transmitting user specific flags over a time slot q of a user identity channel to indicate one or more users to whom the associated one of the plurality of data sub-packets is intended.

31. The transmitter of claim 22, wherein the transmitter is a base station belonging to a wireless communication system.

32. The transmitter of claim 22 further comprising of:

means for adjusting a power of the means for transmitting the first control information over the control channel.

33. The transmitter of claim 32 further comprising of:

means for receiving control channel quality feedback.